



### GENERAL

The Shure Models 515SBGX, 515SBG-18X, and 515SBG-18XF microphones are low-impedance dynamic microphones designed to be mounted on flexible goosenecks or fixed pips. Optimized frequency response and a unidirectional (cardioid) pickup pattern makes them ideal for language labs, paging applications, and base station communications. They are also recommended for use as talkback or cuing microphones in TV, film, and recording studios. Because of their low impedance, these microphones retain their level and response characteristics even when long lengths of cable are used.

All three models are supplied with a push-to-talk button and a four-conductor cable (two conductors shielded).

### Features

- Frequency response optimized for announcing, narration, and paging applications
- Cardioid pickup pattern symmetrical about axis
- Neodymium magnet for high signal-to-noise ratio
- Shock-mounted cartridge for quiet operation and low stand/handling noise
- Tough diecast locking grille and handle
- Built-in push-to-talk button controls microphone circuit and relay or control circuit
- 45.7 cm (18 in.) gooseneck and mounting flange supplied (515SBG-18X and 515SBG-18XF only)

### VARIATIONS

**MODEL 515SBGX:** Does not include gooseneck or mounting flange

**MODEL 515SBG-18X:** Includes gooseneck and 76.2 mm (3 in.) diameter mounting flange

**MODEL 515SBG-18XF:** Includes gooseneck and 44.4 mm (1-3/4 in.) diameter mounting flange

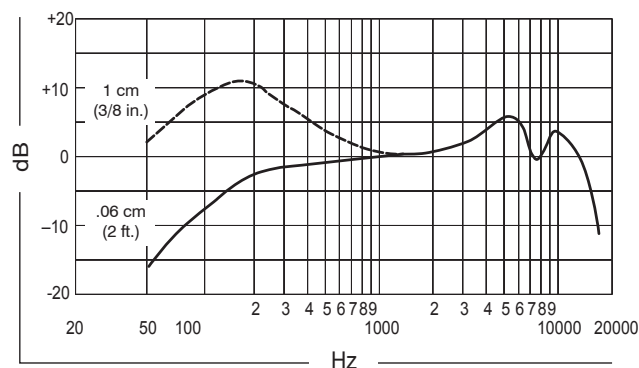
### SPECIFICATIONS

#### Type

Dynamic (moving coil)

#### Frequency Response

80 to 15,000 Hz (see Figure 1)

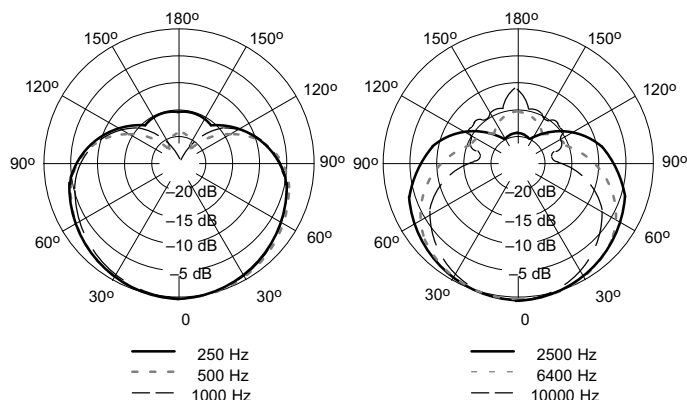


TYPICAL FREQUENCY RESPONSE

FIGURE 1

#### Polar Pattern

Cardioid (unidirectional). Effective rejection of sound at rear of microphone is uniform at all frequencies, while front pickup characteristics are uniform about axis (see Figure 2).



TYPICAL POLAR PATTERN

FIGURE 2

#### Impedance

150  $\Omega$  rated (180  $\Omega$  actual)

#### Output Level (at 1,000 Hz)

Open Circuit Voltage: -57 dBV/Pa\* (1.4 mV)

\*1 PA = 94 DB SPL

#### Phasing

Positive pressure on diaphragm produces positive voltage on RED cable relative to BLACK cable lead

## Switch

Built-in, leaf-type, non-locking, push-to-talk

## Shock Mount

Internal rubber vibration isolator

## Cable

Highly durable cable with effective hum shielding, four conductors (two shielded), plastic jacketed

Model 515SBGX: 1.8 m (70 in.)

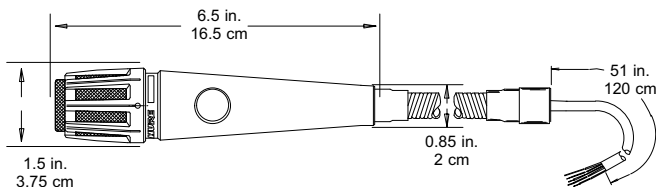
Models 515SBG-18X and 515SBG-18XF: 1.3 m (51 in.) from gooseneck

## Case

Silver finish die casting with black enamel diecast grille and stainless steel screen

## Dimensions

See Figure 3



OVERALL DIMENSIONS  
FIGURE 3

## Certification

Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 55103).

## Net Weight

515SBGX .....	380 g (13.5 oz)
515SBG-18X .....	900 g (31.8 oz)
515SBG-18XF .....	787 g (27.8 oz)

## FURNISHED ACCESSORIES

1.27 mm (.050 in.) Hex Wrench .....	80A67
45.75 cm (18 in.) Gooseneck (515SBG-18X, 515SBG-18XF only) .....	G18
Flange (515SBG-18X only) .....	A13HD
Flange (515SBG-18XF only) .....	A12

## REPLACEMENT PARTS

Cartridge .....	R180
Grille Assembly .....	RK334G
Cable .....	70A4063
Gooseneck (515SBG-18X, 515SBG-18XF) .....	G18
Flange (515SBG-18X) .....	A13HD
Flange (515SBG-18XF) .....	A12
Windscreen .....	A85WS

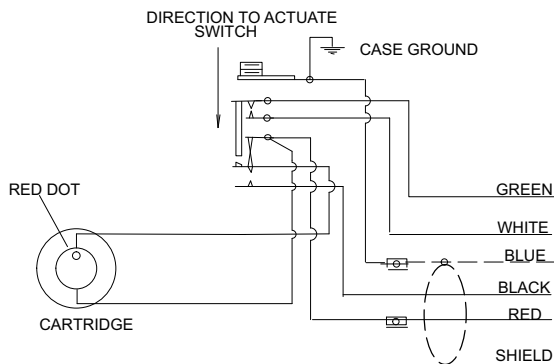
## CONNECTIONS

These low-impedance microphones are designed for connection to microphone inputs rated at 75 to 300 ohms. Using balanced-line low-impedance cables permits very long cable lengths without affecting response or level. The RED and BLACK cable leads are the microphone conductors for balanced-line connections; the shield is connected to the amplifier ground.

For unbalanced operation, connect the BLACK lead to the shield, and use the RED lead as the microphone conductor.

The GREEN and WHITE cable leads are used to control an external relay or control circuit. Refer to the following table and to the wiring diagram in Figure 4.

INPUT TYPE	WIRE COLOR	FUNCTION	XLR CONNECTOR	1/4 IN. PHONE PLUG
UNBALANCED	RED	AUDIO	PIN 2	TIP
	BLACK	AUDIO GROUND	PIN 3	SLEEVE
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE
BALANCED	RED	AUDIO +	PIN 2	TIP
	BLACK	AUDIO -	PIN 3	RING
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE



INTERNAL CONNECTIONS  
FIGURE 4

## MOUNTING THE 515SBG-18X AND 515SBG-18XF

Mount the 515SBG-18X or 515SBG-18XF as follows:

1. Thread the supplied hexnut all the way down on the mounting flange.
2. Thread the gooseneck tightly on the flange.
3. Back the hexnut up against the gooseneck, and use a wrench to tighten the nut firmly against the bottom of the gooseneck.

## MOUNTING THE 515SBX ONTO A GOOSENECK

Mount the 515SBGX onto a gooseneck or fixed pipe with a 5/8 in-27 thread as follows:

1. Unscrew the black end cap from the microphone.
2. Remove the thin metal washer and the metal spacer.
3. Re-install the washer by sliding it back onto the cable and up into the end of the microphone.
4. Slip the cable into the gooseneck or pipe and thread the microphone firmly to the mount.

For additional service or parts information, please contact Shure's Service department at 1-800-516-2525. Outside the United States, please contact your authorized Shure Service Center.

# SHURE®

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